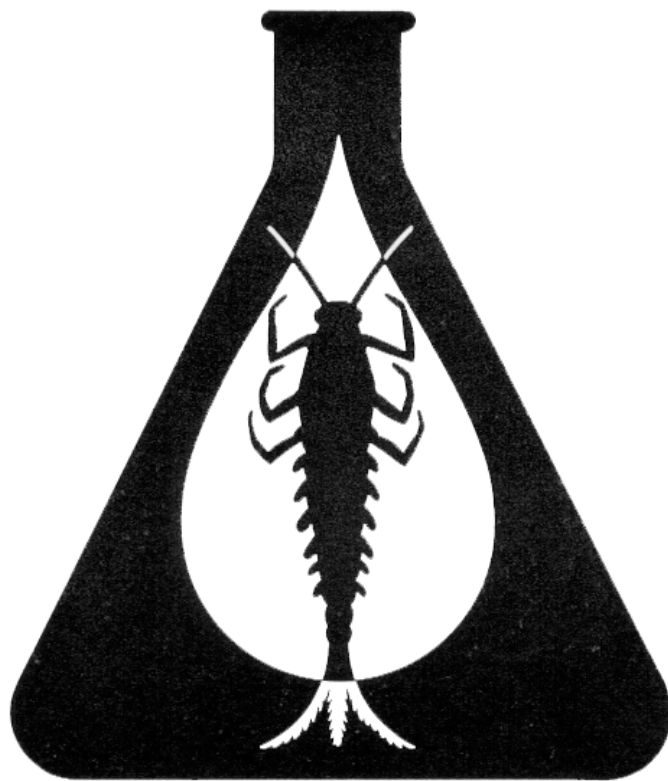


# **Volunteer Water Quality Monitoring Program**



**A Partnership of  
Missouri Department of Conservation  
Missouri Department of Natural Resources  
Conservation Federation of Missouri  
and  
Citizen Volunteers**

## **What is the Volunteer Water Quality Monitoring Program?**

It is an opportunity for citizens of all ages to learn about water quality and get involved in protecting Missouri's water resources. We provide you with training in physical, biological, and chemical monitoring concepts and techniques. The sampling equipment to complete monitoring will be provided.

## **Why was this program developed?**

- ◆ To inform Missourians about the condition of their aquatic resources.
- ◆ To establish a group of trained volunteers that will provide baseline water quality data for streams statewide.
- ◆ To provide a knowledge base for citizen groups who are interested in improved water quality.
- ◆ To introduce concerned citizens to one another so they can work together towards a common goal.
- ◆ To halt degradation of our stream resources by changing people's attitudes and behaviors.

## **What is in it for me?**

Fun, knowledge, and the satisfaction that you are helping protect our aquatic resources are some of the benefits of volunteer monitoring. Everyone has a responsibility to protect our environment. By volunteering as a water quality monitor, you can make a difference. We need your eyes, ears, and voices to be caretakers of Missouri's streams.

## **Who can participate?**

Volunteer water quality monitoring is open to anyone who is concerned about the condition of Missouri streams and is willing to commit time and energy for training and monitoring. It is an excellent activity for Scout groups, 4-H Clubs, teachers, landowners, and families.



## Where will I monitor?

You may select your own monitoring site or we can help you locate a site on a stream where the state agencies have informational needs. Most monitors select a site on streams that are of personal interest to them.

## What is involved in monitoring a stream?

- ◆ Assessing physical aspects of streams using maps, visual surveys, and flow measurements.
- ◆ Biomonitoring, which involves collecting aquatic invertebrates and calculating a water-quality index based on the presence or absence of pollution sensitive organisms. Examples of aquatic invertebrates are crayfish, mussels, snails, aquatic worms, and immature stages of insects such as mayflies, caddisflies, and midges.
- ◆ Analyzing water samples for chemical parameters such as pH, dissolved oxygen, nitrate, conductivity, and ammonia. You also will collect temperature and flow data.

## How much training do I need?

Biomonitoring training will take approximately one day of your time. If you wish to monitor water chemistry, another one-day workshop is offered. As your interest and experience grow, you may choose to receive additional training.

### Additional training may include:

- ◆ Standardization of chemical testing.
- ◆ Fine-tuning of chemical sampling techniques.
- ◆ Training to identify aquatic invertebrates.
- ◆ Quality assurance/quality control on sampling techniques and results.





## **What equipment will I need?**

Test kits, forceps, and nets will be provided for the collection of samples. Safety equipment (goggles and rubber gloves) will also be provided and should be used when performing chemical tests. You will need your own personal footwear such as boots or “river shoes.”



## **How often will I monitor?**

Volunteers will be asked to sign an agreement with DNR to collect data at their selected site at least 2 - 4 times a year utilizing specific techniques and equipment provided by the program.

## **How will the information I collect be used?**

It will be used to:

- ◆ Establish baseline water quality information for Missouri's stream resources.
- ◆ Inform and educate people about the condition of our streams.
- ◆ Follow long-term trends in statewide water quality and document changes as they occur over time.
- ◆ Locate potential and existing water quality problems and make state agencies aware of situations that may require more extensive monitoring efforts.

## **How do I become a volunteer?**

Attending an introductory level workshop will provide you with the knowledge and techniques you will need to monitor water quality. For more information, contacts are listed below.

### **Stream Team Voice Mail**

800/781-1989

### **Stream Team E-mail**

[streamteam@mdc.mo.gov](mailto:streamteam@mdc.mo.gov)

### **Stream Team Website**

[www.mostreamteam.org](http://www.mostreamteam.org)

### **Missouri Department of Conservation**

#### **Stream Unit**

573/751-4115

P.O. Box 180, Jefferson City, MO 65102-0180

### **Department of Natural Resources**

#### **Water Quality Management Program**

573/751-7428

P.O. Box 176, Jefferson City, MO 65102-0176

### **Conservation Federation of Missouri**

573/634-2322

800/575-2322

728 West Main, Jefferson City, MO 65101

**STREAM TEAM** is a cooperative program of the Missouri Department of Conservation, the Conservation Federation of Missouri, and the Missouri Department of Natural Resources. Our mission is to involve as many conservation-minded citizens as possible to protect and restore Missouri's flowing water resources.



*“The rivers are our brothers. They quench our thirst. They carry our canoes and feed our children. So you must give to the rivers the kindness that you would give any brother.”*

*—Chief Seattle of The Suquamish Indian Tribe*



The Stream Team program  
makes it possible for every Missourian  
to help protect our streams and rivers.

For more information, write:

**Stream Team**

P.O. Box 180

Jefferson City, MO 65102-0180